



VIDEO

FAQ

Q You often talk about different video connections such as composite and SCART, but what's the difference?

A There are four common types of analogue video connectors. In rough order of quality, these are: composite, S-video, SCART and component. However, you will usually be limited in your choices based on which devices you are connecting.

Composite provides the worst picture of the four. It's so named because it's a composite of three different signals referred to as Y, U and V. The Y signal carries the brightness information, often referred to as luminance, while the U and V signals carry the colour information, or chrominance. Your TV then detangles the three signals and makes a picture out of it. The composite connector is shaped like a phono plug and is usually yellow.

S-video separates the luminance and chrominance information on to separate wires, or pins. This improves video quality significantly. S-video connectors look a little like PS/2 keyboard connectors and have four pins and a plastic nub inside them; they are usually yellow or black.

The SCART connector consists of 21 pins and can carry a variety of video signals and stereo audio. Most commonly it is used to carry Red-Green-Blue (RGB) video, where the signal is constructed from the primary colours. This gives excellent video quality, because TVs themselves generate pictures in RGB. Beware, though, as some SCART inputs don't support all the pins on the connector and so will accept only composite video signals.

Component video uses three phono-style cables in red, green and blue. Though the connector can be used to carry RGB video, this is not normally the case. Often one cable is used to carry luminance information, while the other two carry the chrominance signals. One key advantage of component video is that it can carry a progressive video signal, whereas the other types mentioned here are limited to interlaced video. See *What's New, Shopper* January 2005 for more information about interlaced signals.

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Of the analogue video connectors available, component video connectors give the best image quality

REVIEW VIDEO CAPTURE DEVICE

LG
GSA-5169D

RATING ★★★★★

PRICE £86 inc VAT

SUPPLIER www.microdirect.co.uk

DETAILS www.lge.co.uk



Usually we review DVD writers in our storage section, where drive speeds and price are the key considerations. LG's GSA-5169D external drive includes something a little extra, though, coming equipped with both video and audio inputs. This enables it to capture analogue video to DVD in one easy process.

Although it would have benefited from the inclusion of a full printed manual, setup is reasonably straightforward: you just plug it into a spare USB port and install the provided software, which comes on two discs. One has the usual DVD software – in this case Nero Express, PowerProducer Gold and PowerDVD. The other contains the One Touch software for video capture.

The rear of the drive has S-video, composite and phono inputs, so you'll be able to hook up any camcorder or video recorder. Once connected, you just press a button on the front of the drive and it launches the capture software on your PC. Press play on the video device and the software will automatically start capturing. First it captures the video to the PC and converts it to MPEG2. Then it burns the converted video to a blank DVD in the drive. You can capture over two hours of video to a single-sided DVD, but you will need space on your hard disk for the video while it's being converted. The minimum specification for all this work is a 1.6GHz processor and 256MB of RAM.

We captured a variety of footage using the supplied software and played it back on a DVD

player and LCD TV. The video looked pixelated and contained a lot of artefacts from the high MPEG2 compression, which you can't change. We got much better results bypassing LG's software and using Windows Movie Maker instead. The video had fewer compression problems and lacked the pixelation seen previously.

As a DVD writer, the GSA-5169D supports all the current formats, including both types of two-layer discs and even DVD-RAM. It completed our basic DVD+R speed test in a decent seven minutes. It's not terribly quick, but unless you burn DVDs every day you probably won't notice.

If you need to capture analogue video and burn it to DVD then this product does it without any hassle. If you already have a DVD writer then you're better off getting a TV card with analogue inputs or a dedicated capture device. If you're in the market for an external DVD writer, though, the analogue video capture is a potentially useful and inexpensive addition.

Seth Barton



Captures analogue video; reasonably priced



Poor MPEG2 compression from bundled software

SPECIFICATIONS External DVD+/-RW +/-DL drive, 16X DVD+R, 16X DVD-R, 8X DVD+RW, 6X DVD-RW, 8X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 48X CD-R, 32X CD-RW, USB interface, S-video, composite and phono inputs. **Part code** GSA-5169D

HOTLIST TV TUNER

TERRATEC
Cinergy Hybrid T USB XS

RATING ★★★★★

PRICE £78 inc VAT

SUPPLIER www.savastore.com

DETAILS www.terratec.net

PRICE
CUT

This USB stick is a hybrid device that can receive analogue and digital broadcasts.

Terratec bundles the excellent PowerCinema 4 software. This gives you a Sky+ style full-screen EPG, as well as media file and DVD playback. The remote is well designed and the buttons are clearly labelled.

It has all the features you could ever want. Picture quality is great and the software is the best we've seen. This is easily the best of its kind.

SPECIFICATIONS Terratec RF, line-in, composite and S-video inputs, MPEG2 capture format, USB Hi-Speed interface. **Part code** E3318



HOTLIST TV TUNER

FRECOM
DVB-T USB Stick

RATING ★★★★★

PRICE £41 inc VAT

SUPPLIER www.misco.co.uk

DETAILS www.freecom.com

PRICE
CUT

This is the smallest USB digital TV tuner we've ever seen and it's very easy to install. The software's interface isn't brilliant, but it's sufficient for watching or recording the odd show.

For notebook owners who want to watch the occasional programme, it's ideal. It is cheap and the picture quality is good, although you may need a rooftop aerial, depending on the DVB reception in your area.

SPECIFICATIONS RF input, MPEG2 capture format, USB Hi-Speed interface. **Part code** 25451





REVIEW TV TUNER

TERRATEC Cinergy 2400i DT

RATING ★★★★★

PRICE £87 inc VAT

SUPPLIER www.afterhours.co.ukDETAILS <http://uk.terratec.net>

We've been seeing motherboards with PCI-Express slots for some time now. Although the large x16 slots were soon provided for by the latest graphics cards, the smaller x1 and x2 slots have sat empty. But finally a card has arrived to fill this void: Terratec's Cinergy 2400i DT.

PCI-Express isn't the only big draw here. The Cinergy 2400i DT is also the first dual digital tuner TV card we've seen. Previously you needed to use two separate TV tuner devices if you wanted to record one programme while watching another. This was often not possible in mini PCs that have only a single PCI slot. Even if you did have space, it could prove a rather expensive choice.

The card is built around a stylish white PCB, which is great for those with translucent cases. It's a full length card, measuring 148mm long, and wouldn't fit in the first PC we tried because of an inconsiderately placed heat sink. So check that your PCI-Express x1 slot has the necessary space before buying.

Once the card was installed, setup was hassle free. The manual is well written with a friendly and understanding tone. Windows detected the card automatically and found the drivers on the CD without a problem. It comes bundled with CyberLink's excellent PowerCinema 4 software. We followed the setup wizard and it found all the usual digital TV and radio stations without a problem. Channel information was stored for both tuners, so you don't have to search twice.

Initially the software functions as if there were a single tuner. Picture quality is good, on a par with most single tuner cards we've seen. Press the Twin TV button and a second window opens. You can then watch one channel while keeping an eye on another; useful for simultaneous World Cup games. You can also record one programme while watching another. But the PowerCinema scheduler software won't let you record two programmes simultaneously. This is a shame, as both Windows Media Center and Sky+ are capable of doing this. Hopefully the next version of PowerCinema will.

Fortunately for users of Windows Media Center the card is also available without bundled software for around £73 including VAT. So if you want to upgrade to twin digital tuners it's an ideal product. With or without the software it works out cheaper than two separate cards, and takes up less space.

It's not often that a new product is a first in two different respects. It's a pity about the omission of simultaneous recording, but the card works so well it's still a great buy.

Seth Barton

✓ Twin tuners; easy to set up; good remote

✗ Bundled software can't schedule two simultaneous recordings

SPECIFICATIONS RF, IR, MPEG2 capture format, PCI-Express x1 interface. **Part code** E3320

HOTLIST PORTABLE DVD PLAYER

MUSTEK PL510

RATING ★★★★★

PRICE £230 inc VAT

SUPPLIER www.meggydogcomputers.co.ukDETAILS www.mustek.com

With a large 10" screen, Mustek's PL510 portable DVD player is a joy to watch and it still fits comfortably in your lap. It supports Dolby Digital stereo, so listening to movies using headphones is an enjoyable experience.

Battery life is an acceptable two-and-a-half hours, which will let you watch all but the longest films. Unfortunately it lacks DivX playback for home video encoders.

SPECIFICATIONS 10" LCD, 2½ hours' playback, multi-region DVD, SD/MMC card reader. **Part code** PL510



HOTLIST STREAMING MEDIA PLAYER

PINNACLE ShowCenter 200

RATING ★★★★★

PRICE £165 inc VAT

SUPPLIER www.savastore.comDETAILS www.dabs.com

The ShowCenter 200 streams media files from your PC to your living room using Microsoft's Windows Media Connect software. It supports all the most common photo, audio and video file types and is easy to install. Its wired and wireless connections mean it will fit into any home network, too. Best media player on the market.

SPECIFICATIONS 1.5GHz PC required with Windows XP with SP1 and 256MB RAM; SCART, component, S-video, and composite video outputs, two stereo phono, optical and coaxial S/PDIF audio outputs, USB, 100Mbit/s network, wireless 802.11g



CHOOSING A...

VIDEO CAPTURE DEVICE



Step-by-step guide to buying the ideal video capture device

A video capture device lets you record video from a camera to your hard disk ready for editing. Almost all such devices come with software, although its capabilities can vary.

1 Consider the type of inputs you need. Analogue cameras will have a composite output and probably a superior S-video out too, plus stereo audio outputs. Digital video cameras also include a FireWire port, which allows perfect digital transfers to the PC and often back to tape.

2 Video and audio outputs on the capture device allow you to record edited video back to tape. Some systems transmit the editing software's preview display to these outputs for full-screen previews on a TV while you edit.

3 Most capture devices are in the form of PCI cards. If you don't have a spare PCI slot or want a device you can move between PCs, go for a USB or FireWire device. Check that such devices can deliver the video quality you require.

4 Digital video needs to be compressed. The cheapest capture devices rely on software to do this, but hardware encoding is more reliable. Choose a device that compresses to MPEG2 or DV AVI, which give better image quality than other video formats.

5 High-end devices provide hardware acceleration for the editing process, allowing transitions and effects in real time. These features will be available only with the bundled editing software, so make sure it's the one you want to use.

FILL IN YOUR SPECS HERE

(Recommended minimum in grey)

INPUTS: Composite

OUTPUT: None

INTERFACE: PCI

HARDWARE COMPRESSION: None

RENDER ACCELERATION: None